

Tarmac pathfinder project plasma energy and hydrogen technology



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Mike Eberlin, managing director cement & lime

Tarmac is to take part in a ground-breaking project to explore the potential of plasma energy and hydrogen technology in the production of cement and lime.

The activity is being funded by the Department for Business, Energy and Industrial Strategy (BEIS) which has awarded £6.02 million to the Mineral Products Association (MPA) for fuel switching trials.

Tarmac’s Tunstead cement plant in Derbyshire will be host to some of the cement trial. The plant will also be used to explore the viability of hydrogen as an alternative to natural gas for high-calcium lime manufacturing.

Mike Eberlin, managing director of Tarmac’s cement & lime business, said: “Securing this funding is an extremely positive step for our industry as we support the UK’s ambition of achieving net-zero carbon emissions by 2050.

“Collaborative working and embracing innovative technologies are key in our collective efforts to create a lower carbon, resilient built environment and we’re proud to be involved in such an important project which will help inform industry and Government strategic plans on decarbonisation.”

Participation in the fuel switching trials builds on Tarmac’s track record of reducing CO2 emissions across its business and supply chain. The company’s cement business has cut its use of fossil fuels by focusing on the use of alternative fuels, especially those that have a biomass

content, as well as investing in energy efficient plant and utilising clinker replacements.

These activities have helped to significantly reduce carbon emissions arising from the cement manufacturing process and have helped to achieve over 24 percent reduction in CO2 per tonne of product across Tarmac’s full product range compared to 1990 levels.

The cement industry as a whole creates up to 7 percent of worldwide man-made emissions of this gas, while concrete has a marked impact on the environment throughout its life time, potentially contributing to flooding and soil erosion.

The fuel switching project is due to begin this year and the results will be shared with the wider industry and supply chains to ensure the environmental benefits of the technologies are maximised.

